



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

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AUG 20 2018

Ref: 8EPR-N

Russell Bacon, Forest Supervisor
Medicine Bow-Routt National Forests,
Thunder Basin National Grassland
2468 Jackson Street
Laramie, Wyoming 82070

Dear Supervisor Bacon:

The U.S. Environmental Protection Agency Region 8 has reviewed the U.S. Department of Agriculture Forest Service's (USFS) Draft Environmental Impact Statement (EIS) for the Medicine Bow Landscape Vegetation Analysis (LaVA) Project (CEQ No. 20180150) pursuant to Section 309 of the Clean Air Act and the National Environmental Policy Act (NEPA). The Draft EIS proposes treatment of 360,000 acres of pine and spruce bark beetle-affected areas in the Medicine Bow National Forest over a 15-20-year period via mechanical treatments, prescribed burning, timber harvest, and temporary road construction or improvements to reach affected Treatment Opportunity Areas (TOA).

Based on our review of the Draft EIS, the EPA has rated this document as *EC-2, Environmental Concerns - Insufficient Information*. A description of the EPA's rating system can be found at: <http://www.epa.gov/nepa/environmental-impact-statement-rating-system-criteria>. This rating is based on the lack of site-specific detail in some instances to support aquatic resource and air quality impact assessment and mitigation design for this forest-wide project. This letter offers recommendations for including available water quality data, avoiding and mitigating wetland impacts, refining the adaptive management program, designing efficient and effective water quality monitoring, and including air quality and emissions information. Our detailed recommendations, in addition to opportunities for further clarification in the EIS, are provided for your consideration in the enclosure.

Thank you for the opportunity to review this Draft EIS. If further explanation of our comments is required, please contact me at (303) 312-6704, or the lead reviewer of this project, Matt Hubner, at (303) 312-6500 or hubner.matt@epa.gov.

Sincerely,

A handwritten signature in blue ink, appearing to read "P. S. Strobel", is written over a horizontal line.

Philip S. Strobel
Director, NEPA Compliance and Review Program
Office of Ecosystems Protection and Remediation

Enclosure to Medicine Bow Landscape Vegetation Analysis (LaVA) Project Draft EIS

Site-specificity of treatments and NEPA: The approach for the LaVA project is similar to a programmatic EIS for a large area or specific resource (potentially up to 360,000 acres treated in the LaVA Project area). Programmatic EISs would typically identify where tiered site-specific NEPA analyses would be conducted. However, this EIS does not clearly identify whether site-specific NEPA analyses will be included. The USFS is proposing to use screening tools and checklists in concert with adaptive management to implement site-specific treatments. The EIS discusses that the site-specific project process will include a cooperating agency and public participation component. Although it appears that this will not be considered an independent NEPA action, the example screening checklist in the EIS includes a NEPA project number field (indicating site-specific NEPA). We recommend the Final EIS clarify whether project-specific NEPA analyses will be tiered from this document. If the USFS does not intend to tier from this EIS, we recommend the Final EIS discuss the process the USFS will apply in conducting post-NEPA site-specific design and impact analyses as well as how that process is consistent with the NEPA implementing regulations.

Water resources: EPA considers the protection of aquatic resources to be a priority. As identified in the Draft EIS, most treatment activities have the potential to adversely impact aquatic resources. The Draft EIS uses the USDA Watershed Condition Framework and Technical Guide (USDA Guide) to evaluate HUC 6 watersheds in the project area. Of the subwatersheds analyzed, 54 are classified as functioning at risk, while 16 are classified as functioning properly. The Draft EIS provides maps and discussion illustrating the watershed condition, disturbance (roads, trails and vegetation), and water quality and quantity based on the USDA Guide. We appreciate the analyses of these conditions and the discussion of Clean Water Act (CWA) 303(d) impairments to 5 streams in these watersheds. We offer the following water resource related recommendations for the Final EIS.

Roads: Forest road networks are typically the largest source of sediment to streams on USFS lands. We acknowledge and appreciate that the preferred alternative includes 10 fewer miles of permanent road construction than the original proposal in the scoping document. The preferred alternative includes construction of up to 600 miles of temporary roads, and this is one of the larger road construction proposals we have seen in a NEPA document. The proposed reclamation options for temporary roads outlined in the EIS should lead to reduced long-term water resource impacts compared to the construction of additional permanent roadways. Given the large scope of this project, we encourage careful management of the construction, BMPs and maintenance for the temporary and permanent road system. In the Adaptive Management comments below, we offer more specific recommendations for monitoring to detect and remedy any unforeseen impacts to aquatic resources from the road system.

Existing conditions: We identified two places where additional detail would be beneficial in the Final EIS in describing the existing resource conditions. First, the Accounting Unit maps at the beginning of Chapter 3 provide greater resolution than those in the Hydrology section, and the Draft EIS notes that assessments will be conducted at the Accounting Unit scale. Providing details in the Accounting Unit maps such as location of 303(d) impaired waterbodies, wetlands and riparian coverage, sensitive groundwater resources, such as sole source aquifers, municipal watersheds, source water protection zones, sensitive aquifers and recharge areas or inclusion of separate maps with the same level of detail would provide greater insight to the existing water resources. Second, we note that the Draft EIS does not summarize existing ground water resources in the project area. We recommend that the Final EIS

describe these resources and outline potential impacts that could result from project activities. We do note that the Draft EIS discusses Best Management Practices (BMPs) to avoid impacts to ground water, and appreciate the inclusion of this information.

Water quality data and monitoring: The Draft EIS does not include sufficient water quality data or monitoring. Water quality data for the streams and lakes in the project area provide important information to guide management decisions and also serve as baseline data for future monitoring and evaluation of the potential influence on downstream water quality. We recommend the Final EIS include a summary of available information and monitoring data on water quality for the project area. Further, for water resources, the EIS's primary monitoring approach for watershed condition and trends is evaluation of Equivalent Clearcut Area (ECA), not to exceed a 25 percent threshold in a treatment area. This tool may be useful surrogate for data collection, but the absence of water quality monitoring to assess the success of individual project treatments limits the evaluation of potential downstream impairments. Instream monitoring can identify the sometimes-large impacts of temporary water crossings. We recommend that the Final EIS include targeted water quality monitoring of sensitive areas, at a minimum, as part of the suite of tools for evaluating the effectiveness of treatments and their associated BMPs. For example, monitoring in areas with 303(d) impaired waterbodies, high erosive potential and slope, and areas with high road and trail density would afford the USFS to document the success of project treatments and mitigation should no adverse impacts be observed. Conversely, if adverse impacts are identified, there may be support for additional monitoring or for modifying the project treatment approach or mitigation through the adaptive management approach.

Additionally, we note that the EIS outlines that individual projects are to be evaluated by ECA on an annual basis. We recommend that the USFS increase the number of monitoring events, if possible, to avoid overlooking impacts and opportunities to apply adaptive management to resolve the responsible factor(s) in a timely manner. If the USFS determines that an increase in the monitoring of specific projects is unwarranted or infeasible, we recommend the reasons for this decision to be discussed in the Final EIS.

Potential impacts to water resources: The Draft EIS notes the USFS may harvest up to 1,534 acres in wetlands over the 15-20-year life of the project. Additionally, the project includes 534 temporary road-stream crossings, 0.8 miles of temporary road construction through wetlands, up to 12 miles of temporary road construction in the water influence zone, and up to 16,874 acres of harvest in the water influence zone. The Draft EIS indicates that the USFS is aware of the importance of minimizing impacts to wetlands and outlines the potential impacts of activities within these sensitive areas. We appreciate that the EIS addresses the importance of fen wetlands and wet meadows and the protections and treatment exclusions of activities in these areas as provided in the LaVA Project Design features of the EIS. We note that aside from a mention of Executive Order 11990 (Wetlands Management) in the supplemental Hydrology report, our review did not identify if the USFS coordinated with the US Army Corps of Engineers (Corps) to determine the applicability of CWA Section 404 permit requirements to water resources that would be impacted by the project activities and to ensure the appropriate avoidance, minimization and mitigation measures be applied to avoid adverse impacts to these resources. We recommend the Final EIS document any coordination with the Corps regarding impacts to water resources. The Final Rule for Mitigation for Losses of Aquatic Resources [33 CFR Parts 325 and 332; 40 CFR Part 230 (73 FR 19594, April 10, 2008)] emphasizes the need to avoid and minimize impacts to these "difficult to replace" resources and requires that any compensation be provided by in-kind

preservation, rehabilitation, or enhancement to the extent practicable. The EPA recommends the USFS consider the mitigation rule to protect aquatic resources even when a CWA Section 404 permit is not required.

The Draft EIS identifies 5 streams in the project area listed on the Wyoming CWA 303(d) list. The Draft EIS also generally discusses pollutants of concern, but it does not include specific information about the individual waterbodies such as their specific location (i.e. on a map), or if a TMDL exists for any of these impaired waters. We recommend the Final EIS include greater detail on these waterbodies and identify if potential project actions could exacerbate their impaired conditions. If there is a potential for such impacts, we recommend the USFS coordinate with Wyoming DEQ to avoid or minimize that potential.

Adaptive Management: Given the large scale of this project and the rapidly changing conditions in the forest associated with insects, disease, fire and drought, a detailed monitoring plan and adaptive management strategy are critical to the success of this project. We appreciate the adaptive management framework presented in this EIS. The interagency coordination and public participation aspects of the framework along with structured timeframes and milestones are integral features of an effective adaptive management approach. We recommend the adaptive management program include evaluation of ongoing treatment effectiveness and quick reaction to newly discovered concerns. We provide the following examples: (1) As noted above in the water quality monitoring section, we recommend the USFS consider increasing monitoring frequency to act in a more timely manner if results indicate the project treatment is not resulting in progress towards desired conditions. For example, if unanticipated impacts are found in aquatic resources, it may be necessary to require larger riparian buffers or reduction in treatments in or around wetlands identified for treatment. Also, (2) we recommend incorporating additional monitoring requirements, such as instream water quality sampling, that could be included into the monitoring and adaptive management process to further facilitate timely responses and adaptation to avoid or mitigate impacts. (3) Air quality, as discussed in the air quality section below, is another area where targeted monitoring and decision-making triggers can be incorporated into the adaptive management process. (4) Finally, adaptive management relies on a well-defined and rigorously applied monitoring program. Federal budgets for monitoring have fluctuated over time. We recommend the Final EIS discuss the process that will be applied if monitoring budgets fall short of the need for this project. Typically, lack of monitoring would automatically trigger a more environmentally conservative set of mitigation measures.

Air Quality: We appreciate the information provided in the EIS and supplemental documents on the potential impacts of prescribed burns, such as visibility, increased PM_{2.5} and other pollutants, and the discussion of general impacts associated with human exposure to smoke. Our review did not identify any estimated emissions from potential prescribed burning or pile burn treatments in the Draft EIS or supplemental reports. We recommend that the Final EIS include estimated emissions resulting from the fire treatments. While we understand that emissions may be quantified for individual treatments, we recommend that as individual projects are evaluated, they include analysis of the effects of other ongoing treatments (involving prescribed fire or pile burning) to avoid minimizing the cumulative effects to air quality. We also reiterate that there are no decision-making triggers for adaptive management relating to air quality. Without identified triggers in the adaptive management implementation, it is possible for unexpected cumulative impacts to air quality to occur. We recommend that air quality resources are incorporated in the decision-making triggers in the Final EIS.